```
control_2_th_15 | control_0_th_39 | control_0_th_30 | control_ancilla_4_th_5 | control_1_th_41 | control_1_th_9 | control_0_th_37 | control_2_th_33 | control_2_th_54 | control_2_th_22 | control_2_th_49 | control_2_th_49 | control_2_th_17 | control_2_th_59 | control_1_th_27 | control_1_th_27 | control_2_th_38 | control_2_th_38 | control_2_th_38 | control_2_th_39 | control_2_th_39 | control_2_th_49 | contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           control 1 th 25 control 1 th 56 control 3 th 21 control 4 th 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           control 4 th 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            control_2_th_47  control_5_th_33  control_4_th_52  control_ancilla_4_th_63control_ancilla_3_th_42  control_1_th_37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         control 4 th 55 control 4 th 23 control 0 th 57 control 0 th 57 control 0 th 25 control 2 th 38 control 2 th 38 control 2 th 52 control 2 th 52 control 2 th 20 control 2 th 20 control 2 th 37 control 0 th 63 control 0 th 31 control 2 th 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   control_1_th_34 // control_4_th_35/ control_ancilla_3_th_2 control_0_th_33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 control 4 th 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           control 3_th_11 control 2_th_43 control 1_th_24 control 1_th_24 control 1_th_43 control 0_th_56 control 0_th_5
                                                                           control 4 th 45 control ancilla 1 th 24 control 0 th 49 control 0 th 17 control 3 th 45 control 4 th 12 control 1 th 33 control 2 th 44 control 4 th 44 control 3 th 44 control 3 th 43 control 3 th 43
        control 2 th 53 | control 2 th 53 | control 3 th 14 | control 2 th 53 | control 3 th 14 | control 3 th 15 | control 4 th 53 | control 5 th 54 | control 5 th 52 | control 5 th 54 | control 5 th 54 | control 5 th 55 | control 5 th 54 | control 5 th 55 | control 6 th 54 | control 6 th
                                                                         control of the system of the s
                                                                                                                                                                                                                                                                                                                                                          control th 2 control th 51 control th 52 control
    ontrol ancilla 3 th 22 control 3 th 32 control 3 th 34 control
        control 4 th 22 control 4 th 22 control 4 th 24 control 4 th 2
                                                                                                                                                                                                                 control 2 th 38 | control 2 th 39 | control 2 th 39 | control 2 th 39 | control 3 th 39 | control 4 th 39 | control 4 th 39 | control 4 th 39 | control 5 th 49 | control 5 th
                                                                                                                                                                                                                 control 4 th 1 control ancilla 4 th 3 control ancilla 4 th 24 control ancilla 4 th 24 control 5 th 29 control ancilla 4 th 1 control ancilla 4 th 24 control ancilla 4 th 24 control ancilla 4 th 24 control ancilla 4 th 3 control ancilla 4 th 3 control ancilla 4 th 24 control ancilla 4 th 24 control ancilla 4 th 3 control ancilla 4 th 3 control ancilla 4 th 24 control ancilla 4 th 24 control ancilla 4 th 3 contr
        control sth 43 control ancilla 4 th 43 control ancilla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Control of the second ancilla 4 th 62 control ancilla 
                                                                           control ancilla 5 th 25 contro
                                                                                                                                                                                   7_th_1/2 antion and that 4 th 34 control 2 th 4 control 2 th 4 control 2 th 31 Control 2 th 31
          control 7 th 52 | control ancilla of th 49 con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the the control of the state of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   control of the 4 Control of the 5 Contro
                                                                                                                                                                                                               Mountrol & th/48 frontrol ancilla/8 th 48/ control of th/46/ contr
                                                                                                                                                                  Theily of the original and the stand of the 
control ancilla 8 th 29 contro
  control ancilla 8 th 37 kontrol ancilla 8 th 38 kontro
              ancilla 7 th 42 | Control 8 th 43 | Control 8 th 44 | Control 8 th
```